

Stream Team Annual Report

A Summary of Stream Team Activities

2007



More than 20 students from Stream Team 2804 planted tree seedlings, monitored water quality, and picked up litter as part of their "Sustain Mizzou Stream Day" events last spring on Hinkson Creek in Boone County. Thumbs up!

Stream enthusiasts agree, watersheds are "where it's at." All the land shedding its runoff to a particular area is defined as a watershed. Landscapes are connected by streams to form watersheds. Streams connect people and people connect to form Stream Teams! This whole web of connections is what fuels the Stream Team Program.

Like many before, 2007 was a year filled with success and accomplishments. The Program continued to grow at a fast pace; we gained 303 new Teams! However, the really inspirational part is seeing that not only do citizens become a part of this awesome effort, but the effort becomes a part of them! They begin to identify themselves, in part, by their passion, dedication, and accomplishments related to Stream Team. Many times their membership in Stream Team is even included in their life list of accomplishments and involvement.

The highlights featured in this report are a celebration we share with our dedicated volunteers!

- ◆ 550 tons of trash were removed from Missouri streams.
- ◆ 17,529 trees were planted.
- ◆ The first *Stream Team Birding* workshop was held in addition to an *Understanding Streams* course specifically for float outfitters.
- ◆ Regional meetings continued around the state.
- ◆ Large-scale cleanups continued to engage hundreds of volunteers.
- ◆ Over 2,000 storm drains were marked to alert passers-by that inlets are linked directly to streams.
- ◆ 1,779 trips were made to monitor water quality in adopted streams.
- ◆ \$3.8 million worth of volunteer labor.

Kee reading to learn more about our fantastic year!

Missouri Stream Team . . . promoting
citizen awareness and involvement in
river and stream conservation.



◆ Education ◆ Stewardship ◆ Advocacy ◆

Stream Team Success

Citizens Understand That Quality Water Means Quality Life

Water Quality Monitoring continues to draw many individuals to the Stream Team Program. To date, we have trained over 6,300 citizens in water quality training classes. This year a total of 38 workshops were held. Below is a summary of those workshops and the number of volunteers trained:

Water Quality Monitoring Workshop Type	Number of Workshops	Number of Volunteers Trained
Introductory	18	360
Level 1	9	117
Level 2	5	59
Level 3	3	5
CSI	4	37
Total	39	578

We continue to develop specialized monitoring opportunities and associated training. Monitoring for chlorides continued this year with 40 volunteers trained to Level 1 or above participating. This provides baseline data that has not generally been available in most areas. Chlorides at high levels can be toxic to aquatic life and can be a particularly persistent issue in urban areas. Six streams showed elevated levels in some Teams' samples and these will be studied further.

Cooperative Stream Investigations (CSI) continue to provide meaningful information. This specialized monitoring fosters cooperation between the Missouri Department of Natural Resources (MDNR), watershed management committees, and volunteers in performing sampling. The primary focus of CSI sampling is *E. coli*. CSI volunteers must be at least Level 2 trained and must have submitted consistent and reliable data. Volunteers are also required to attend the MDNR's Basic Sampling Training. They



Sometimes the natural beauty surrounding us is simply breathtaking beyond words. Teacher Caroline Toole of Climax Springs School (Stream Team 313) captured this gorgeous snapshot of the Niangua River while on a water quality monitoring trip.

are trained alongside agency personnel on the protocols for collecting and handling environmental samples, transportation to a qualified laboratory, and proper use of the chain of custody. Sample analyses are performed by the State Environmental Laboratory or an MDNR authorized laboratory. This training allows volunteers to perform baseline sampling prior to and throughout special projects being conducted by MDNR. This year the Lake of the Ozarks Watershed Alliance had twenty-seven volunteers who attended CSI training and regularly monitored the Lake of the Ozarks for *E. coli*.

Volunteer Water Quality Monitoring continues to be one of the most important components to the Stream Team Program. It is a popular activity and provides members with a meaningful way to give life to their efforts by submitting data from many areas that might otherwise not be available. Our volunteers are the initial eyes and ears for many reported water

quality problems and their data is being used to classify streams statewide.

Stream Team Academy . . . We Never Stop Learning!

Three workshops were held this year: *An Introduction to Crayfish*, *Stream Team Birding*, and *Understanding Streams*. This was the premiere for the birding workshop and also the first time that Missouri's float outfitters were the targeted audience for one of our workshops (*Understanding Streams*).

An Introduction to Crayfish continues to be one of our most popular workshops. Led by Stream Team Biologist Chris Riggert, attendees spend the day learning about crayfish life history and identification. Several attendees joined us for the optional field trip to survey live specimens the following day.

Stream Team Birding was led by two Conservation Department Outreach

Stream Team Enthusiasm

and Education employees who are avid birders. Jeff Cantrell and Kevin Badgley volunteered to lead the workshop and offer their support for the Program. We honed our skills in the classroom, took walks through riparian areas and floated the Elk River with binoculars in hand the whole time. Sixty-six species were identified by sight or call during the two-day class!

An *Understanding Streams* workshop was held for float outfitters, which involved eighteen individuals representing ten businesses and eight watersheds. They learned about the interconnected relationship of streams with their floodplains and upper watersheds, and the concept of streams being products of the interactions of water, energy, sediment, and vegetation. We discussed how these interactions occur and how changes made on the landscape and within the stream system affect these interactions. Outfitters left the workshop with a clearer

understanding of situations on their own river.

In addition to teaching Stream Team members, staff also enjoy taking time to keep learning. Two staff members attended the North American Benthological Society (NABS) National Meeting in Columbia, South Carolina. They participated in presentations and field trips and attended workshops. These meetings help to keep our staff's skills sharp and also give us an opportunity to share our knowledge and program experience with other states.

Out of the River and Into the Bag

The Program continues to sponsor Stash Your Trash, an effort which provides red mesh bags to Canoe Outfitters and Stream Team volunteers. This

year, over 250,000 bags were provided to 110 outfitters. An additional 30,500 were provided to Stream Teams. We have also been supplying more of the larger green mesh bag and blue 50-gallon plastic bags to Teams for litter pickups. This year we provided 9,700 of the 2'x3' green mesh and 4,100 of the 50-gallon bags. These bags helped to make it possible to remove several hundred tons of trash from Missouri streams.

The Canoe Outfitters show their support by offering discounts to Stream Team volunteers. This year nearly 100 of these same outfitters were featured in our directory offering discounts. Check our 2008 Stream Team Float Outfitters Directory the next time you go floating. Just remember to bring your Stream Team ID card!

We continue to get outside contributions from corporations to help with the purchase of trash bags. This year, the REI St. Louis Stream Team nominated the Stream Team Program to be eligible to apply for a grant from REI national corporate office. Annually, REI dedicates a portion of its operating profits to help protect and restore the environment, increase access to outdoor activities, and encourage involvement in responsible outdoor recreation. REI employees nominate organizations, projects, and programs in which they are personally involved to receive funding or gear donations. The request for \$5,000 to purchase 7,000 green mesh trash bags was awarded in the fall of 2007. Also, for the second year in a row, the generosity of the Anheuser-Busch Corporation provided trash bags for river and stream clean-ups by virtue of a \$5,000 grant and an additional 7,000 green mesh trash bags. Stream Teams from around the state thank these companies for their support and generosity!

Environmental Biology students from Stream Team 907 at Park University in Parkville proudly display a net full of critters sampled at White Alloe Creek in Platte County.



Stream Team Growth

Information at Your Fingertips

Stream Team, the American Fisheries Society, and the Missouri Department of Conservation partnered to publish helpful stream resources online. This wealth of knowledge is available to anyone who would like to learn more about streams and watersheds. *Missouri Streams Fact Sheets* cover the what, how, and why of streams, from the channel, floodplain, and watershed to stream habitat and water quality! Twelve of these educational sheets are now posted on the Stream Team Web site (www.mostreamteam.org) under the Stream Team Library link. Whether you're a Stream Team or any kind of water enthusiast, *Missouri Streams Fact Sheets* will keep you informed about the inner workings of your favorite stream. Read on!

Regional Meetings Continue

Central and St. Louis Regions both hosted Stream Team gatherings in 2007.

The Central meeting was held in Columbia. The day's agenda included program updates, information on new activities, and presentations on local research and management projects. The Show-Me Clean Streams Association presented on recent accomplishments and Missouri River Relief gave an overview of their "science of trashology"! Networking and sharing took place and several left the meeting with new ideas for re-igniting their Team or plans to link up with other groups in their area.

The St. Louis Region Stream Team Conference held in Arnold was another success. The attendees were provided workshops and presentations by other

Teams, county officials, Stream Team staff, and area school Stream Teams. As a special treat, participants were regaled by the bluegrass sounds of *The Saw Mill Band* who warmed up for the main attraction, *Brewer and Shipley*. This folk rock band from the 70s known for the hit, "One Toke Over The Line," performed a tribute to Stream Teams. The duo sounded as good as they did back in the day! A comment from Tom Shipley about leaving Current River mud on the floor of Carnegie Hall during a performance brought a roar of approval from the Stream Team audience. The conference was planned and implemented by a committee of members from N.O.R.P. (Northern Ozark Rivers Partnership, a Stream Team Association from the St. Louis Region), and Stream Team staff.

AmeriCorps

Twelve AmeriCorps Stream Team Assistants served in six communities in 2007. The Assistants spent half their time with local sponsors, who contributed administrative support, and half assisting other local Stream Teams. The Assistants reported activities that included over 21,000 participants and accounted for over 20% of the volunteer hours summarized in this report.

The AmeriCorps Project is administered by Missouri River Communities Network, a nonprofit organization whose mission is to preserve and restore the historic, cultural, and natural resources of the Missouri River and its surrounding communities, and to encourage citizen participation in these endeavors. Local sponsors included Open Space Council, Great Rivers Greenway, and Missouri Coalition for the Environment in St. Louis; James River Basin Partnership and Water-

shed Committee of the Ozarks in Springfield; Table Rock Lake Water Quality, Inc. in Kimberling City; and Bryant Watershed Education Project in West Plains.

Three of the 2006-2007 Assistants re-enlisted, and nine new assistants joined the Project in September 2007, to begin the current project year. Elk River Watershed Improvement Association (Pineville), Top of the Ozarks Resource Conservation and Development (Houston), and Confluence Greenway (St. Louis) also joined as local sponsors in September 2007.

Please see www.mostreamteam.org/AmeriCorps.asp for more information.

Accomplishments are Highlighted Through Awards

Every year it is an honor to present our Stream Team Awards to those that rise to the top. The awards are chosen from among leaders in several categories. Rankings are taken from activity reports submitted by Team members. This year's winners were:

Adult Category

Awareness: Team 1711 Jamie Salvo Paige Team
Honorable Mention: Team 2860 Mark & Boneta Hensley Family
Leadership: Team 2513 River De Peres/Lindenwood Park
Honorable Mention: Team 1361 Castor River Crew
Stewardship: Team 2895 Newton County Stream Team
Honorable Mention: Team 1857 Fenton Stream Cleaners

Youth Category

Awareness: Team 1142 Noel Conservation Club
Honorable Mention: Team 749 St. Paul Lutheran School
Leadership: Team 2790 Rohan Woods School
Honorable Mention: Team 266 Conway River Rats
Stewardship: Team 2162 Wentzville Middle School
Honorable Mention: Team 922 Sears Youth Center

Twenty volunteers also received recognition this year for dedicating a decade to water quality monitoring. A total of forty-three members now share this honor.

Stream Team accomplishments go beyond our own program and several mem-

Stream Team Potential

bers were honored by other groups as well. This year Vicki Richmond (Team 175 and 1878) received the Conservation Department's coveted *Master Conservationist Award*. Reeds Springs R-IV High School (Stream Team 432) received EPA's *Presidential Environmental Youth Award* for their water quality monitoring efforts. Brian Waldrop (Stream Team 211) won a *Community Service Award* in Arnold, Missouri for all his efforts in the community and on the Meramec River. Dennis Sullivan (Stream Team 401 and 1995) won the *Chairman's Environmental Award* from his employer, Union Pacific, for outstanding awareness, leadership, and responsibility. Daniel Blake (Stream Team 2748) received the Boy Scouts of America *William T. Hornaday Badge* for leading Boy Scout Troop 52 in Water Quality Monitoring and providing an educational PowerPoint presentation to others about the program.

Parkway North High School with leaders Russ and Sarah Barton (Stream Team 3084) earned their way to placing 1st in the Missouri State Envirothon Competition. The five-member Team of high school students shined in this weeklong North American environmental education competition.

Do we have a group to be proud of, or what?!

Members In the Limelight

The magazines produced by both the Missouri Department of Conservation and the Department of Natural Resources have begun to regularly feature Stream Team members and their successes. This is a great way to spread the good news about the program and give our volunteers some highly deserved credit for their

efforts. You can find a compilation of these features on our Web site at www.mostreamteam.org/library.asp.

Speaking of Web sites, if you haven't checked out the Stream Team site lately, you'll see some pleasant surprises. It received a nice remodeling and reorganization this year and we hope it will not just look nicer, but also be easier to navigate. On the site you will find a "New Postings" section with up-to-date information and an "Issues" tab containing mounds of educational information related to streams and water quality. The on-line Library also contains a section on "Stream Research" to provide members with even more of the latest stream information. Our Water Quality Monitoring notebooks are now online as well for quick, easy reference. You can find them under "Water Quality Activities."

Just Around the Bend

We anticipate that 2008 will be filled with more exciting accomplishments. Each year, new members become a part of our efforts and more areas of the state are represented. Their new fire and passion rejuvenates staff and old timers. Next year we'll have more opportunities for learning, including the return of our Fish Identification workshop. An Understanding Streams workshop for members is also planned. Kansas City will see its first Regional Summit, annual large-scale cleanups will occur again and much, much more!

We're gearing up not only for 2008,

but 2009, when the Program will have its 20th Birthday. Some of our continuously-active volunteers have been with us since the beginning and we're looking for ways to celebrate. A video featuring 20 years of volunteers and accomplishments will be our centerpiece. As you drive through your community or travel the state this year, take time to enjoy our streams and remember what a significant contribution Stream Teams are making to our flowing water resources. The Program exposes the deep well of citizen concern for conservation that exists in Missouri. The members have a passion for their streams, a desire to make them better, and the will to find a way to make it happen.



The future of Missouri Stream Team rests in the hands of the children we touch.

The Stream Team website at www.mostreamteam.org offers a world of information about the Stream Team Program, activities, workshops, and much more. Visit the Stream Team Shopping Mall or buy Stream Team Coffee to help us raise funds for the Program. Log on for a visit today!

Stream Team Activity Totals 2007

These totals are based on activity reports submitted by Stream Teams.

Activity	Participants	Time Spent (volunteer hours)	Number of Units	Value (Hours x \$19.52*)
Adopt-An-Access	777	2,566.0	30 accesses	\$50,088.32
Advocacy	141	1,257.5	1,257.5 hours	\$24,546.40
Agency Events	307	359.5	27 events	\$7,017.44
Articles Written (newspaper, newsletter, etc.)	175	273.2	162 articles	\$5,332.86
Association Activities	273	1,406.5	1,406.5 hours	\$27,454.88
Award Winners	11	18.5	7 awards	\$361.12
Display at Fairs, etc.	493	1,672.5	72 events	\$32,647.20
Educational Projects	2,143	5,978.4	797 events	\$116,698.37
Event Planning	808	3,507.0	1,206 events	\$68,456.64
Forestkeepers -- Forest Monitoring	19	37.0	3 trips	\$722.24
Greenway Development Projects	56	198.3	37 projects	\$3,870.82
Grant Projects	68	600.0	10 projects	\$11,712.00
Habitat Improvement	142	833.3	53 projects	\$16,266.02
Inventory	24	63.0	14 inventories	\$1,229.76
Letters Written in Support of ST Issue	24	35.8	34 letters	\$698.82
Litter Pickups	18,584	127,096.0	550.8 tons of trash	\$2,480,913.92
Media Contacts	119	268.5	69 interviews	\$5,241.12
Meetings (held or attended)	3,173	7,113.7	4,872 attendees	\$138,859.42
Mentoring	1,590	2,515.8	2,515.8 hours	\$49,108.42
Monofilament Recycling Project	4	7.0	2.5 ounces	\$136.64
Other Miscellaneous Projects**	3,486	7,945.5	2,050 projects	\$155,096.16
Planted Trees	848	2,733.8	17,529 trees	\$53,363.78
Photo Point Monitoring	74	106.0	152 trips	\$2,069.12
Presentations to Other Groups	9,487	9,828.8	510 presentations	\$191,858.18
Recruitment (new members)	264	316.9	174 people	\$6,185.89
River Observation (related to possible pollution events)	5	34.3	34.3 hours	\$669.54
Stream Access Maintenance	8	7.3	2 events	\$141.52
Storm Drain Stenciling	168	473.3	2,054 drains	\$9,238.82
Streambank Stabilization Projects	174	2,138.5	33 events	\$41,743.52
Watershed Mapping	58	192.7	31 trips	\$3,761.50
Workshops (attended or conducted)	740	5,212.8	704 attendees	\$101,753.86
Water Quality Monitoring	7,473	12,592.2	1,779 trips	\$245,799.74
Zebra Mussel Monitoring	40	70.0	2 trips	\$1,366.40
Totals	51,756	197,459.6		\$3,854,410.42

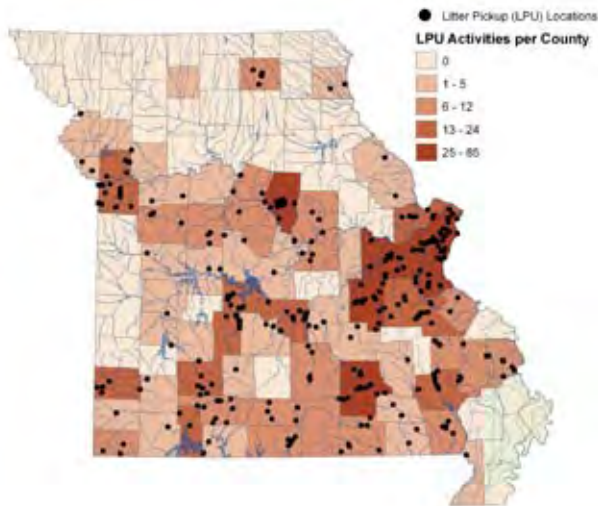
* \$19.52/hour is the current national non-agricultural wage rate for the estimated value of volunteer time.
This figure is provided annually courtesy of the U.S. Department of Labor.

** Includes projects like Web site development, newsletters, scout programs, fund-raising projects, etc.

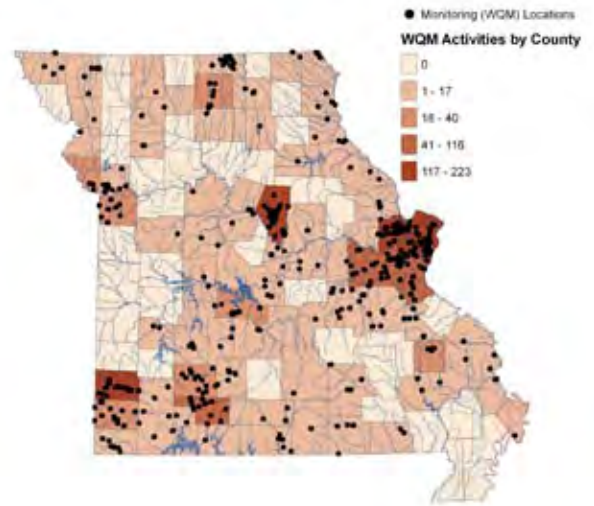
**Over
\$3.8 million!**

Stream Team Activity Sites 2007

LITTER PICKUP SITES

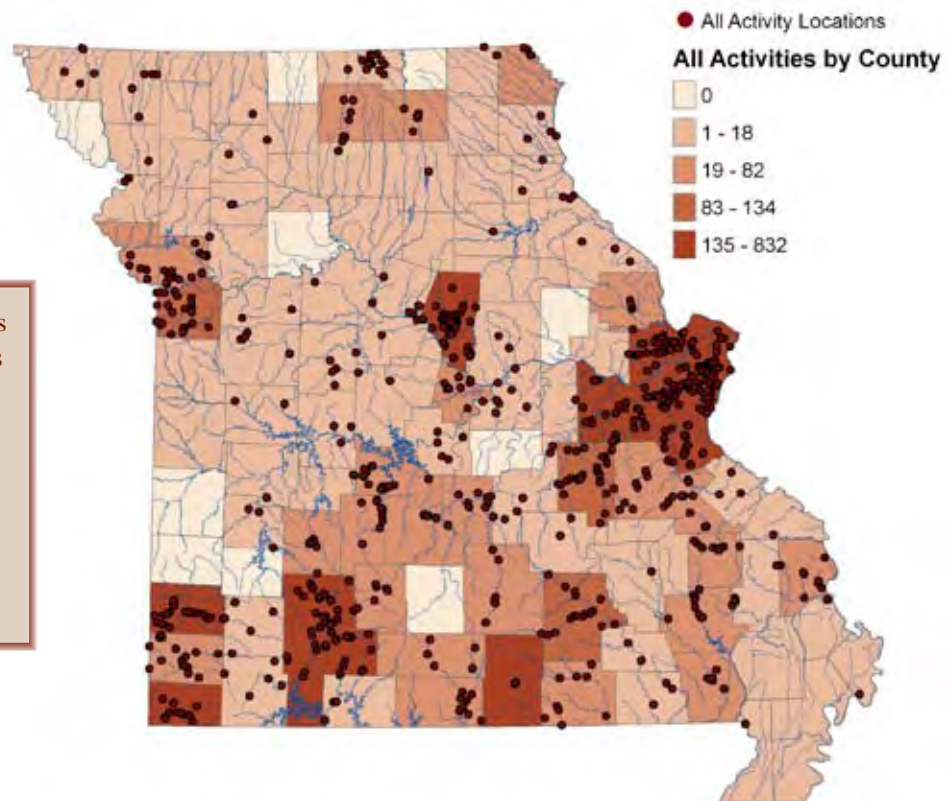


WATER QUALITY MONITORING SITES



ALL ACTIVITY SITES AND ALL ACTIVITIES PER COUNTY

These maps indicate sites where reported activities occurred in 2007. Some activity sites are not mapped because we do not have detailed site information, and many other activities are not site-specific.



Stream Team Reflections 2007



The Liberty High School Environmental Club (Team 1715) monitored water quality on the East Fork of Shoal Creek. Sponsor Rick Knowles said, "These kids work really hard on some of our local environmental issues."



Anna Brasher reported her Heman Park volunteers from Team 3191 collected over a ton of trash from River Des Peres. Whew!



Stream Team Academy offered attendees a chance to hone their birding skills at a Birding Workshop. Field trips included birding-by-canoe on the Elk River which revealed 66 species!



Stream Team AmeriCorp Assistant Kelly White (at right) mentored Stream Team 890, Grace Hill Neighborhood Services, with water quality monitoring efforts on Maline Creek in Saint Louis.



Stream Teams just don't mess around! Stream Team 2911 (The Platin Creek Litter Gitters) and Stream Team 211 (Arnold Stream Team) combined forces and made small work of the trash collected using heavy equipment.

♦ Commitment ♦ Respect ♦ Cooperation ♦



Troy Gordon (Friends of Big Muddy Team 2489) checks his cinder block monitoring project in the Missouri River for zebra mussels. Troy's enthusiasm and dedication will never be forgotten. In loving memory 1960 – 2008.



Christopher Cain (Twin River Rangers Team 1008) ponders his choice of events and sessions at the St. Louis Regional Stream Team Conference.



Linda Baysinger's students from Fulton Middle School (Team 3028) faithfully conducted litter pickups and monitored water quality all year on Stinson Creek. They are having a blast!



Vicki Richmond of Stream Teams 175 & 1875 stands with Conservation Department Director John Hoskins after receiving the prestigious Master Conservationist Award for her many conservation efforts which include Blue River Rescue, Missouri River Relief, events, training programs, conferences, and festivals.



Save some room for the canoers! Cherokee Landing's Team 1314 reported a good day's effort on the Big River in St. Francis County.

♦ Strength ♦ Accomplishment ♦ Heart ♦



David Bethel (Stream Team 3169) takes pride in operating the wastewater lagoons in Kingston, Missouri. His Volunteer Water Quality Monitoring training is put to good use.



Joan Leavens' new Blue River Team 3375 mentored Shawnee Mission Summer Institute students as they monitored water quality. The river, the kids, the sunshine, the KC skyline, and Missouri Stream Team . . . what a beautiful combination!



Stream Team 421 (the Martin King Family) held their 5th Annual Family cleanup on Huzzah Creek. What a great family tradition!



During Stream Team 211's cleanup on the Current River, members took a great snapshot of an emerging dragonfly.



The Jeremy Tracy Construction Team 2596 of Branson hoisted 23 tires and 6 pickup loads of trash from Davis Creek in Lafayette County. Awesome!

♦ Character ♦ Effort ♦ Enthusiasm ♦



Diane Fitzgibbons's students from Brittany Hill Middle School (Team 1192) participated in their 7th annual litter pickup and tree-planting event on the Blue River.



Stream Teams collaborated again this spring near DeSoto. Team 401 (Joachim Stream Team) displayed their stream table model, and Team 211 (City of Arnold) presented macroinvertebrate identification.



Lydia Lemons and her Blue Grass River runners of Team 3156 regularly clean the Castor River. This time, she had 96 volunteers who collected a mountain of tires!



Stream Team 3181 set up a monofilament recycling bin at Emmenegger Park in Kirkwood. Good job! Interested? Call or e-mail us for a recycling bin application.



Carla and Kevin Hogan of Team 3017 (Horse Camp Jacks Fork) conducted litter pickups, attended workshops, and began a Photo Point Monitoring project.

Stream Team Staff

2007



Back row from left: Sherry Fischer (MDC), Paul Calvert (MDC), Amy Jungclaus* (MDC), Andrew Branson* (MDC), Priscilla Stotts (DNR), Chris Riggert (MDC)
 Front row from left: Mark Van Patten (MDC), Bob Schulz (MDC), Susan Higgins* (DNR)
 Not pictured: Wayne Maresch (DNR), Richard Duchrow (DNR)
 (*new staff welcomed during 2007)

*Thank you, Stream Teams,
 for another year of hard work and dedication.
 Don't forget, we are here to help!*



Stream Team is sponsored by
 Missouri Department of Conservation
 Missouri Department of Natural Resources
 Conservation Federation of Missouri



Questions?

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